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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/858,065	05/14/2001	Dustin L. Green	14531.90	1960

7590 05/23/2005

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EXAMINER

TRAN, THAI Q

ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 05/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/858,065	Applicant(s) GREEN ET AL.	
	Examiner Thai Tran	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19-34 is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Mercier (US 6,865,747 B1).

Regarding claim 1, Mercier discloses in a system (Fig. 2) that includes an MPEG decoder and has access to a stored MPEG stream, a method for displaying a reconstructed MPEG stream based on the stored MPEG stream in an accelerated speed in a forward or reverse mode (col. 9, lines 64 to col. 10, line 25), comprising:

an act of identifying, from an index of I-frames of the stored MPEG stream, selected I-frames to be included in the reconstructed MPEG stream (col. 10, lines 20-31 and lines 48-50);

an act of generating the reconstructed MPEG stream by including the selected I-frames in the reconstructed MPEG stream and inserting one or more blank P-frames between temporally adjacent I-frame, the I-frame and P-frames included in the reconstructed MPEG stream being selected to generate a playback rate and a bit rate (col. 10, lines 20-31 and lines 48-50); and

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an act of decoding the reconstructed MPEG stream using the MPEG decoder for display on a display device associated with the system (the HDTV receiver 224 disclosed in col. 4, lines 62-66 and col. 10, lines 1-2).

Regarding claim 2, it is noted that the claimed wherein the stored MPEG stream includes a set of temporally adjacent frames in the sequence I-frame, B-frame, B-frame, P-frame, B-frame, B-frame, P-frame, B-frame, B-frame, P-frame, B-frame, B-frame, P-frame, B-frame, B-frame is the inherent sequences of the MPEG2 standard of Mercier.

Regarding claim 3, the claimed wherein the stored MPEG stream includes a repeating frame sequence, wherein the frame sequence is a set of temporally adjacent frames in the sequence I-frame, B-frame, B-frame, P-frame, B-frame, B-frame, P-frame, B-frame, B-frame, P-frame, B-frame, B-frame, P-frame, B-frame, B-frame, and wherein the frame sequence repeats one or more times is the inherent sequences of the MPEG2 standard of Mercier.

Regarding claim 4, Mercier discloses the claimed wherein the system comprises a home entertainment system (HD-DVD disclosed in col. 4, lines 49-57).

Regarding claim 5, Mercier discloses the claimed wherein the home entertainment system is associated with a computer network (CPU disclosed in col. 8, lines 55-57 and HTML or SML disclosed in col. 9, lines 57-64).

Regarding claim 6, Mercier discloses the claimed where I-frames selected for the reconstructed MPEG stream are temporally adjacent I-frames in the stored MPEG stream (col. 10, lines 20-31 and lines 48-50).

Regarding claim 7, Mercier also discloses the claimed wherein the act of identifying I-frames of the stored MPEG stream comprises skipping one or more I-frames after each selected I-frames (col. 8, lines 55-57 and col. 10, lines 20-31 and lines 48-50).

Regarding claim 8, Mercier discloses the claimed wherein the act of generating the reconstructed MPEG stream comprises inserting one blank P-frame between each of the selected I-frames (col. 10, lines 20-31 and lines 48-50).

Regarding claim 9, Mercier discloses the claimed wherein the act of generating the reconstruction MPEG stream comprises inserting tow or more blank P-frames between each of the selected I-frames (col. 10, lines 20-31 and lines 48-50).

Regarding claim 10, Mercier discloses the claimed wherein a blank B-frame is inserted between each of the selected I-frames (col. 10, lines 20-31 and lines 48-50).

Regarding claim 11, Mercier discloses the claimed wherein the bank B-frames are also used to generate the playback rate and the bit rate (col. 10, lines 48-50).

Regarding claim 12, Mercier discloses in a system (Fig. 2) that includes an MPEG decoder and has access to a stored MPEG stream, a method for displaying a reconstructed MPEG stream based on the stored MPEG stream in an acceleart4d speed in a forward or reverse mode (col. 9, lines 64 to col. 10, line 25), comprising:

a step for reconstructing an MPEG stream by selecting one or more I-frames from the stored MPEG stream and inserting one or more blank frames between the I-frames to generate a playback rate and a bit rate (col. 10, lines 20-31 and lines 48-50); and

an act of decoding the reconstructed MPEG stream using the MPEG decoder for display on a display device associated with the system (the HDTV receiver 224 disclosed in col. 4, lines 62-66 and col. 10, lines 1-2).

Regarding claim 13, Mercier discloses the claimed wherein the type of frame inserted between the I-frames is a P-frame (col. 10, lines 20-31 and lines 48-50).

Regarding claim 14, Mercier discloses the claimed wherein the type of frame inserted between the I-frames is a B-frame (col. 10, lines 20-31 and lines 48-50).

Regarding claim 15, Mercier discloses the claimed wherein the selected one or more I-frames are temporally adjacent in the stored MPEG stream (col. 10, lines 20-31 and lines 48-50).

Regarding claim 16, Mercier discloses the claimed wherein one or more I-frames in the stored MPEG stream are skipped after selection of an I-frame in the stored MPEG stream for use in generating the reconstructed MPEG stream (col. 8, lines 55-57 and col. 10, lines 20-31 and lines 48-50).

Computer program product claim 17 is rejected for the same reasons as discussed in claim 1 above and the CPU disclosed in col. 10, lines 33-35.

Regarding claim 18, the claimed wherein the computer-readable medium comprises one or more physical storage media is met by the CPU disclosed in col. 10, lines 33-35.

Allowable Subject Matter

3. Claims 19-34 are allowed.

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Claims 19-29 and 33-34 are directed to a method for displaying the stored MPEG stream in a reverse mode without requiring simultaneous buffering of all frames between temporally adjacent I-frames. Each independent claim identifies the uniquely distinct features "based on the first I-frame, an act of iteratively reconstructing and buffering P-frames until a particular P-frame that is temporally adjacent to the second I-frame is reconstructed and buffered" and "an act of iteratively reconstructing other P-frames and B-frames between the first I-frame and the particular reconstructed P-frame to continue displaying video data encoded in frame sin the reverse sequence compared to the original sequence without simultaneously buffering all frames between the first I-frame and the second I-frame". The closest prior art, Mercier (US 6,865,747 B1), Halfant (US 2005/0025456 A1), and Oguz et al (US 6,871,006 B1) disclose convention trick plays of MPEG data, either singularly or in combination, fail to anticipate or render the above underlined limitations obvious.

Claims 30-32 are directed to a method for displaying the stored MPEG stream in a reverse mode without requiring simultaneous buffering of all frames between temporally adjacent I-frames. Independent claim identifies the uniquely distinct features "a step of displaying video data encoded in the second I-frame, a particular reconstructed P-frame temporally adjacent to the second I-frame, and reconstructed B-frames between the second I-frame and the particular reconstructed P-frame, in reverse sequence, the particular reconstructed P-frame having been iteratively reconstructed from the first I-frame" and "an act of iteratively reconstructing other B-frames between the first I-frame and the particular reconstructed P-frame to continue displaying video

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data encoded in frames in the reverse sequence compared to the original sequence without simultaneously buffering all frames between the first I-frame and the second I-frame". The closest prior art, Mercier (US 6,865,747 B1), Halfant (US 2005/0025456 A1), and Oguz et al (US 6,871,006 B1) disclose convention trick plays of MPEG data, either singularly or in combination, fail to anticipate or render the above underlined limitations obvious.

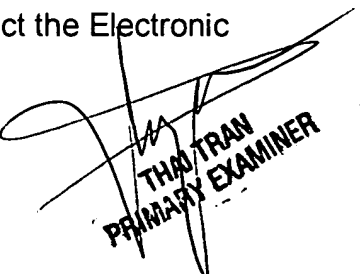
4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The cited references relate to trick play operations.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai Tran whose telephone number is (571) 272-7382. The examiner can normally be reached on Mon. to Friday, 8:00 AM to 5:30 PM.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


THAI TRAN
PRIMARY EXAMINER